

### **REMARKS/ARGUMENTS**

The non-final Office Action of March 4, 2005, has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the instant application are respectfully requested. Claims 10 and 18 have been amended. Claims 1-15 and 18-21 remain pending in this application.

Claim 18 stands objected to due to an alleged informality in the claim. Without acquiescing to the objection, Applicant has amended claim 18 to further the scope of protection.

#### **First Set of Rejections**

Claims 1, 3-7, 9-11, 12-15, 18, and 20-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over 3G TS (hereinafter, *3G TS 23.107*) in view of Davies et al. (U.S. Patent No. 6,483,805, hereinafter *Davies*). Applicant respectfully traverses this rejection.

Applicant's claim 1 recites, among other features, "including at least one Serving GPRS Support Node (SGSN) in communication with at least one Gateway GPRS Support Node (GGSN) via an Internet Protocol (IP)-based network comprising a plurality of intermediate nodes." In support of this feature of Applicant's claim 1, the Action cites to portions of *3G TS 23.107*. Specifically, the Action cites to Figure 2 on page 12 of *3G TS 23.107*, identifying the CN EDGE in Figure 2 as the "at least one Service GPRS Support Node (SGSN)" and the Gateway in Figure 2 as the "at least one Gateway GPRS Support Node (GGSN)." The Action alleges that the CN EDGE and the Gateway are in communication "via an Internet Protocol (IP)-based network," specifically relying on paragraph 9.4 on page 30 of *3G TS 23.107*. Finally, the Action alleges that the Internet Protocol (IP) based network comprises, "a plurality of intermediate nodes," citing the UMTS/GPRS nodes of Figure 2. Applicant respectfully disagrees with the alleged showing of a plurality of intermediate nodes. Specifically, the CN EDGE and the Gateway in Figure 2 of *3G TS 23.107* are shown directly connected together without any intermediate nodes. Even assuming, without admitting, that the CN EDGE in Figure 2 is the "at least one Service GPRS Support Node (SGSN)" and the Gateway in Figure 2 is the "at least one Gateway GPRS Support Node (GGSN)," they are not in communication with each other "via an

Internet Protocol (IP)-based network comprising a plurality of intermediate nodes.” As such, *3G TS 23.107* fails to teach or suggest this features of Applicant’s claim 1.

Further, Applicant’s claim 1 recites, among other features, “defining a plurality of delay-differentiated paths within the IP-based network between each of the at least one SGSN and each of the at least one GGSN, wherein each of the plurality of traffic classes has at least one delay-differentiated path of the plurality of delay-differentiated paths corresponding thereto.” For support in rejection of this feature, the Action cites to the UMTS/GPRS Bearer Service (BS) Manager) in Figure 2 of *3G TS 23.107* and a number of specific elements and paragraphs. Applicant respectfully disagrees with the alleged teaching of *3G TS 23.107*.

*3G TS 23.107* fails to teach or suggest a plurality of delay-differentiated paths. For this feature, the Action cites to paragraphs 6.4.6 and 6.4.7 on page 24 and paragraph 9.4 on pages 30-31, including the reference to Differentiated Services (Diffserv). The cited paragraphs describe Diffserv codepoints and Quality of Service parameters. However, there is no reference to “a plurality of delay-differentiated paths.” Further, there is no description or suggestion of “Differentiated services (Diffserv) flows/paths” as alleged in the Action (Action, page 3). The term differentiated services was well known in the art at the time of the invention. For example, the term is defined in Newton’s Telecom Dictionary, 16<sup>th</sup> Edition. (See attached Appendix A). As defined, packets are forwarded in a network applying differentiated grades of service. However, there is no teaching or suggestion of the existence of a plurality of delay-differentiated paths.

Paragraph 9.4 on page 31 of *3G TS 23.107*, cited in the Action, states that, “[a]pplication level IP based QoS shall be mapped to UMTS packet core QoS by a network element at the border of the network, such as the 3G gateway node...Differentiated services would require that there is either one QoS profile for each traffic type of alternatively the priority and traffic type information is included in the data packets.” However, there is no teaching or suggestion in this portion, nor any other portion, of *3G TS 23.107*, that teaches or suggests Applicant’s claim 1 feature of, “defining a plurality of delay-differentiated paths within the IP-based network between each of the at least one SGSN and each of the at least one GGSN.”

Still further, the Action cites pages 12-13, paragraphs 6.2.2.1 and 6.2.2.2 of 3G TS 23.107 as describing Applicant's feature of, "wherein each of the plurality of traffic classes has at least one delay-differentiated path of the plurality of delay-differentiated paths corresponding thereto." The Action states, "note that BS Manager in CN edge defines CN BS QoS attributes from each packet of the received QoS attributes, and each packet maps/responds to each different QoS classes of traffic." (Action, page 3). The fourth full paragraph, under section 6.2.2.1 on page 12, describes the operation of the UMTS BS manager in the CN EDGE. As described, the UMTS manager of the CN EDGE translates attributes and services. There is no teaching or suggestion of, "wherein each of the plurality of traffic classes has at least one delay-differentiated path of the plurality of delay-differentiated paths corresponding thereto."

As admitted by the Action, 3G TS 23.107 "does not explicitly disclose assigning a label to at least a portion of data, to provide labeled data." (Action, page 4). To teach this feature, the Action relies on *Davies*. Specifically, the Action relies on the concept of a Per Hop Behavior (PHB), which is a set of forwarding treatments. (See col. 6, lines 63-65). However, the concept of a PHB fails to teach or suggest, "routing ...the labeled data...based on correspondence of the label to the first delay-differentiated path." There is no teaching or suggestion in *Davies*, either alone or in combination with 3G TS 23.107, of this feature of Applicant's claim 1.

Therefore, for at least the above stated reasons and because *Davies* fails to cure the deficiencies of 3G TS 23.107, the combination of 3G TS 23.107 and *Davies* fails to teach or suggest every feature of Applicant's claim 1. As such, Applicant respectfully requests withdrawal of the present rejection of claim 1.

Applicant's independent claim 10 has been amended to include some of the features of Applicant's independent claim 1 described above. To the extent independent claims 10, 18, and 21 have the same or similar features as independent claim 1 discussed above, the reasons differentiating claim 1 from the cited references apply to independent claims 10, 18, and 21 as well. Accordingly, independent claims 10, 18, and 21 are patentably distinct from the art of record and withdrawal of the rejections is respectfully requested.

Applicant's claims 3-7 and 9, 11 and 13-15, and 20 which depend from claims 1, 10 and 18 respectively, are patentably distinct over the art of record for at least the same reasons as their base claim and further in view of the novel features recited therein.

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *3G TS 23.107* in view of *Davies* and further in view of Gibson et al. (U.S. Patent No. 6,680,943, hereinafter *Gibson*). Applicant respectfully traverses this rejection.

Dependent claim 2, which depends from claim 1, is patentably distinct over the art of record at least for the same reasons as its base claims and further in view of the novel features recited therein. The *Gibson* reference fails to cure the deficiencies as noted above with respect to Applicant's claim 1. As such, withdrawal of the rejection is respectfully requested.

Claims 8, 12, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *3G TS 23.107* in view of *Davies* and further in view of RFC 2598 and RFC 2597 ("An Expedited Forwarding PHB," Network Working Group, June 1999, hereinafter *RF2598* and "Assured Forwarding PHB Group," Network Working Group, June 1999, hereinafter *RF2597*). Applicant respectfully traverses this rejection.

Dependent claims 8, 12, and 19, which depend from claims 1, 10, and 18 respectively, are patentably distinct over the art of record at least for the same reasons as their base claims and further in view of the novel features recited therein. The *RF2598* and *RF2597* references fail to cure the deficiencies as noted above with respect to Applicant's claims 1, 10, and 18. As such, withdrawal of the rejection is respectfully requested.

### **Second Set of Rejections**

Claims 1, 3-7, 9-11, 12-15, 18, and 20-21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Widegren et al. (U.S. Patent No. 6,621,793, hereinafter, *Widegren*). Applicant respectfully traverses this rejection.

The filing date accorded *Widegren*, is May 21, 2001, more than four months after the filing of the present application. The Action appears to rely on the November 6, 2000, and May 22, 2000, filing dates of provisional applications Nos. 60/246,501 and 60/206,186 (hereinafter "provisional applications"), from which *Widegren* claims priority, to qualify it as prior art under section 102(e). Thus, in order to anticipate the claims of the present application, any subject

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matter cited in the *Widegren* patent must be fully supported (i.e. disclosed) in the *provisional applications*. For the convenience of the Examiner, Applicant includes a copy of the *Widegren provisional applications*, U.S. Application Serial Nos. 60/246,501 and 60/206,186, as they were obtained from the Public PAIR website at the U.S. Patent and Trademark Office website and from the Group Art Unit at the United States Patent and Trademark Office as Appendices B and C, respectively.

Applicant submits that the *Widegren provisional applications* fail to provide support for substantial material cited in the office action. As a result, portions of the subject matter relied upon in *Widegren* are not prior art, and therefore do not preclude patentability under 35 U.S.C. § 102(e). The rejection is mooted by the failure of the *Widegren provisional applications* to support the subject matter identified in the Action. Accordingly, Applicant submits that *Widegren* does not constitute prior art to the rejected claims. Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(e).

#### **CONCLUSION**

It is believed that no fee is required for this submission. If any fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733 accordingly.

All rejections having been addressed, Applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same.

Respectfully submitted,  
**BANNER & WITCOFF, LTD.**

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By:   
for John M. Fleming  
Reg. No. 56,536

**Reg. No. 49,024**

1001 G Street, N.W.  
Washington, D.C. 20001-4597  
Tel: (202) 824-3000  
Fax: (202) 824-3001